Review Article
Emotional changes due to COVID-19

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Abstract

The COVID-19 pandemic has done a disservice not only to the cause of physical health but has irrevocably hampered the emotional wellbeing of the entire population. However, a paradigm we usually undermine is sexuality and sexual health while discussing the impacts. A myriad of emotional changes such as corona phobia, anxiety, sadness, altered sexual behavior has been observed, being further aggravated by certain factors like misinformation, stigma, or imposed preventive and restrictive measures. Many sections of the society across gender, occupation, socioeconomic status, and vulnerabilities have been disproportionately affected, which needs specifically focused interventions and overarching redressal mechanisms to alleviate their health issues in a complete holistic sense.

Introduction

Human civilization is passing through one of the most critical phases of human history, challenging its existence is Coronavirus disease 2019 (COVID-19). COVID-19 was first declared an international public health emergency on 30 January 2020 by World Health Organization (WHO). Since then the diseasewas first reported in China in December 2019, has continued to surge in many different countries. Due to home confinement strategies and intermittent lockdowns as preventive measures, this infection has caused emotional and mental health impacts.

'Emotional health' by definition is the ability to express and manage feelings through different phases of life in an age-appropriate manner (PFBH Assessment Center, 2019). It includes emotional intelligence as well as regulation and comes under the purview of mental health (positivepsychology.com, 2020). Emotional wellbeing depends upon the individual experiences, behaviors, socio-demographic factors, external environment (home and workplace), economic factors, health status indicators, and interpersonal relationships. It has been seen that social

interaction, intimacy boosts wellbeing and serves as critical coping factors during such disasters. Although literature related to this pandemic and psychological health is increasing, there is a shortage of discussion on a vital aspect, the sexual and reproductive health at all levels: individual, systems, or society.

Sexuality has been an essential determinant of relationships and health in general, but the discussion of the chronic impact it suffers is still in its infancy. Ultimately, the balance that existed amidst all these factors has been dismantled, which has propelled many emotions to predominate these times.

Varying emotional changes during COVID-19 pandemic

◆ Corona phobia

There has been a mass fear of COVID-19, termed as "corona phobia," which means the fear of contraction, moving out, concerns about the safety of family, has generated a plethora of psychiatric manifestations across the different age groups and strata of society (Dubey et al., 2020).

◆ Fear & anxiety

Fear is a natural, powerful, distressing human emotion secreted with the adrenaline rush, making us anxious or enacts inappropriately under normal circumstances. This fear about a new disease and what could happen is overwhelming. Public health actions such as social distancing have made people feel isolated and lonely, thus increasing specific mental health problems, including depression, anxiety, and increased stress (CDC, 2020; Loneliness during coronavirus, 2020).

◆ Obsessive-Compulsive Disorder (OCD)

In this uncertain scenario of the pandemic, the disproportionate use of preventive strategies like maintaining hygiene, sanitizing, and mask usage may lead to OCD. It is a type of anxiety disorder in which a person gets caught up in a pattern of obsessions, causing recurrent thoughts and urges that make an individual anxious. Any flu-like symptom under the current circumstances, along with many Covid-19 precautions like stress on cleanliness, effective panic buying, hoarding, and repetitive actions of sanitization regularly advertised at media platforms, may intensify the condition and prove to be harmful (Chatterjee et al., 2020).

◆ Cognitive dissonance

Psychologists believe that people are experiencing mental discomfort due to opposing thoughts and feelings, known as 'Cognitive dissonance'. To maintain their wellbeing by reducing their discordance between lockdown compliance and loneliness, people are endeavoring in different ways like US mass protests, denial of a pandemic, claiming virus-free country, and virtual rallies (Levy, 2020).

◆ Anger and sadness due to a feeling of being stuck in a helpless situation, where people are not only losing their loved ones or their health but facing financial issues leading to more flawed precautionary measures acceptance and economic distress(How we make decisions during a pandemic, 2020).

◆ Altered and discriminatory decision making in the pandemic due to peer pressure to follow the new norms (masking, social distancing, self-quarantine, and hand sanitization) comply with a different and changing status quo and battle the uncertain disruption in old routines. A better understanding of how we make

decisions can not only help us make better ones, but it can also help experts learn how to nudge us toward healthy behaviors (Nowak et al., 2020; How we make decisions during a pandemic, 2020).

- **Changes in sexual desires and behavior**

COVID-19 being a contagious infection, has generated fear among the couples regarding the guilt of transferring the infection to the partners. These altered sexual dynamics have led to voluntary or imposed sexual abstinence, inducing distress, and loss of sense of emotional belonging. This chronic sexual repression has shown to cause performance anxiety and affected sexual confidence, which can eventually have lead to arousal disorders, erectile dysfunction, and anorgasmia and in extreme forms aggravate mental health disorders like depression, insomnia, and anxiety.

Sexual frustration has been observed among couples who didn't live together, had pre-existing marital discordance, and resorted to extramarital affairs. They have been subjected to extreme negative behaviors like verbal abuse, oppression, inter-partner violence, or marital rape leading to separation or divorces. A few couples abstaining from sexual intercourse, people in long-distance relationships, or singles have been reverting to masturbation as a replacement of partnered sex, which is considered emotionally binding. This has resulted in high levels of perceived dissatisfaction and declining self-gratification (Banerjee and Rao, 2020).

Theories

Everyone reacts differently to stressful situations, which science tries to explain through theories. Such as:

- Behavioral Immune System (BIS) theory, which states people develop negative emotions (e.g., aversion, anxiety, etc.) for self-protection when faced with potential disease threat, adopt avoidant behaviors (e.g., avoid contact with people who have pneumonia-like symptoms), and obey social norms strictly (e.g., conformity) (Li et al., 2020).

- Stress theory and perceived risk theory, public health emergencies trigger more negative emotions and affect the cognitive assessment. However, long-term negative emotions may reduce people's immune function and destroy the balance of their standard physiological mechanisms. So, they may overreact to any disease in case of less appropriate guidance from authorities. Therefore, it is essential to understand the potential psychological changes caused by COVID-19 promptly (Li et al., 2020).

- A study conducted in Poland examined dark personality correlates and health beliefs using the health belief model to understand adaptive (preventive measures including hand washing, masking, and following government-imposed restrictions) and maladaptive behavior (hoarding supplies, non-compliance to physical distancing) related to COVID-19. The sample included Dark Triad traits (manipulative instincts, cynicism, and psychopathy) and collective and singular narcissism to study preventive health behaviors.

Researchers assumed that personality traits are likely to be associated with mechanisms that facilitate adopting certain behaviors about one's health. Put otherwise; traits may be indirectly linked to health behaviors through beliefs. Post the completion of the study, the results were concurrent with the researcher's observations as participants characterized by the 'Dark Triad' traits and narcissism were engaged less in the

prevention and more in self-interest and risk-taking behavior like hoarding supplies. This points to the utility of health beliefs in predicting behavioral changes during the pandemic, explaining (at least in part) problematic behaviors associated with the dark personalities that cater to these sections through targeted approaches and strengthening the pandemic response (Nowak et al., 2020).

Common factors inducing emotional changes during COVID-19

Print, electronic, social media and Infodemic Media platforms have always been considered a valuable resource for surveillance and interventional mass campaigns. But within days of the outbreak, an unrelenting abundance of false facts and negative news has increased much more rapidly than the disease itself, creating 'social media hysteria'.

Coronavirus Infodemic has led to panic by rampant rumors, flamboyant news propaganda, and misinformation beyond our health systems and administration's curbing capacity, resulting in mental pressure, phobia, and irritability. Ramifications of disease outbreaks and its communalization, death headlines, increasing case updates have played an instrumental role around the world in disseminating "covidocy" long-lasting stigma, false insecurities, and multiple emotional health issues (Dubey et al., 2020).

COVID-19 stigma

Stigmatization has been quite evident in the history of pandemics worldwide, and COVID-19 has been no different. The major brunt of this discrimination is faced by all essential workers and the marginalized sections of society. There has been a rise in stigmatizing factors like alienation, sexism, bigotry, and segregation, with all its social and economic consequences. Infection-related 'Xenophobia' has been seen as accounting for a particular community or culture. It has been noted that a stigmatized individual tends to hide critical information and is hesitant to seek medical care, which increases the burden of infection(Dubey et al., 2020).

Emotional effects due to quarantine and isolation

The quarantine and isolation measures imposed to halt the spread of COVID-19 have cornered people, separating them from their families. The emotional upheavals range from irritability, fear of transmitting the infection to dear ones, despair, indignation, uncertainty, dissatisfaction, isolation, denial to severe conditions like depression, insomnia, suicide. Suspected and quarantined cases have been feeling perplexed about their health status. Post quarantine and isolation have resulted in dire consequences such as post-traumatic stress disorder (PTSD) due to exclusion or rejection from society (Dubey et al., 2020). To cope with loneliness in these periods, people have taken online dating, digital sex, which has given rise to additional concerns of online sexual extortion, cybercrimes, and digital safety (Banerjee and Rao, 2020).

Factors affecting sexuality

The sudden lifestyle change, adaptation to virtual work demands, the constraint of space in homes, kids being around all the time, additional household chores, professional commitments and obligation to share every moment of the day have resulted in monotony and inhibited sexual stimulation and sexual activity frequency among couples. Sexuality is also influenced by the sense of desire for the other, and performing different roles during the lockdown has meant less time to invest in self-care. People feel less physically attractive and hence don't feel like indulging in sex.

This is emotionally unhealthy and indicative of a paradox; disharmony between sentiments of being loved, desired, and cared for by a partner on one side and requirement of one's own space and privacy on the other (Dewitte, Otten and Walker, 2020).

Impact of COVID-19 on different sections

Healthcare workers

During the pandemic, with an increase in healthcare force requirements, working in long-hour shifts with limited resources, infrastructure, and treatment, there is a fear of contracting the infection and the possibility of spreading it to their family members. The fear of transmission of novel coronavirus and apprehension about sexual practices makes them stay away from their partner. When returning to their partners, they feel a sense of guilt of returning back to sexual life, which eventually limits their emotional support & bonding. All these determinants result in emotional pressure, which may trigger feelings of chronic loneliness, helplessness, stress disorders, and burnout (Banerjee and Rao, 2020; Dubey et al., 2020).

The attack of doctors and violence against them following COVID-19 patients' deaths has also unleashed emotional and psychological havoc on the entire community. A trend that has triggered all of this is the status of 'superheroes' or 'warriors' which on the one hand has added value to their work whereas on the other hand has compelled them not to give up or fail, further parking them in the corner seeking emotional support or appreciation. Health professionals have been experiencing indirect trauma in the form of appetite loss, attention disorders, irritability, numbness, and misery due to continued exposure (Dubey et al., 2020; Ornell et al., 2020).

Children

With online classes and constant toil switching to virtual adaptation with almost negligible social interaction, children are severely affected by emotional changes. This pandemic has been throwing all the children to a work-oriented environment sans physical activity and a sedentary lifestyle. The confinement of youngsters in houses has increased child sexual abuse, pornography, and digital abuse, instilling terror, agitation, and angst hampering their personality development. Children have too much exposure to COVID-19 related information through media and daily conversations in the family, instilling traumatic thoughts of ultimate life events, like falling very sick or die.

The story of economically deprived children is way more unfortunate in terms of sexual and emotional health. Struggle for a two-time meal and loss of livelihood of parents is petrifying, paving the way for extended ill-consequences of this pandemic, such as child labor, child trafficking, and forced early age marriages. Also, with no exposure to education in any form due to financial, physical constraints and the digital divide; children are sinking into a long term mental health crisis (Ghosh et al., 2020; Robson, 2020; Times of India, 2020).

Elderly

The senior citizens, often the neglected ones, face the wrath of this mandatory phase of social distancing more than ever. Either staying alone or with no domestic help around, no transport system, and inadequate family support, they can't leave their houses even for essentials like food and medicines. Also, being at the heightened risk of susceptibility to the infection, they are excessively anxious, fear the death of their own and others, and become vulnerable to

abuse. Their daily routines have changed, and the kind of medical care and support they received has declined due to being confined in secluded homes. The ability to stay socially connected has been affected as some live alone and are on a pension, which may have unleashed additional financial hurdles. (Dubey et al., 2020; UNICEF, 2020; WHO, 2020).

Women

COVID-19 has affected women disproportionately due to various social, cultural, and economic factors. Women face a sharp increase in caregiving responsibilities with even less freedom, space, and financial security (What Covid-19 teaches us about women's mental health, 2020).

Lockdowns have increased the rates of domestic violence resulting in psychological distress. Young girls and women suffer from poor menstrual hygiene due to disparate distribution and availability of safe menstrual products adding to their woes.

It's been observed that women have also faced increased pressure from families to conceive, which is reflected in the rise in the number of pregnancies. Pregnant and postpartum women are also experiencing emotional changes as even routine visits to health care facilities for antenatal care and infant immunization amidst the pandemic are likely to create a great sense of anxiety in mothers about their health and that of their unborn or newborn baby (Manjunatha, Kumar and Bada Math, 2020). Previous literature from SARS and MERS has shown that amidst the catastrophic situations, adverse pregnancy outcomes such as miscarriages, abortions, pre-maturities, and maternal deaths are common that generate fear among sexually active couples (Banerjee and Rao, 2020).

Marginalized population

In our country, with poor public health infrastructure and the pandemic's maximum impact, most marginalized sections have been more vulnerable to being affected by the infection and the entailing stigma, discrimination, and socioeconomic repercussions due to which they are at a higher risk of psychological illness. Migrant women who faced sexual harassment at rehabilitation camps have unleashed another disturbing weaving in terms of social and sexual impact on life. Incidences like these have challenged fundamental human rights, legal and sociopolitical standing they hold in the society, which has intensified the inequities and resulted in defiance. The unexpected displacement and income deprivation have added to their rage, which eventually has been contributing to emotional wreckage with increased suicide rates among them (Dubey et al., 2020).

People with pre-existing mental illness

During the pandemic, exposure to stressful situations and reliving old painful experiences of the past due to more time at hand leads to the recurrence of pre-existing mental health conditions (Dubey et al., 2020). For chronic depression and generalized anxiety disorder patients, the lockdown has put a menace on daily life activities. The added responsibility to obey infection control measures has increased their stress. Factors like negative news, job loss, financial distress, lack of social engagement, and uncertainty affects them disparagingly due to their vulnerabilities and fragile states of disorganized thinking. Patients with bipolar disorders and schizophrenia may have been experiencing psychotic relapses, and COVID-19 can mess their rationality to push them into their delusions (e.g., feeling that medical persons are trying to infect me). Most of them may miss their in-person counseling or regular

medicine intakes, and this lack of psychiatric care can predispose them to even precarious mental states (Chatterjee et al., 2020).

Suggested interventions

With the above scenario of emotional, sexual, and mental health statusof various segments of the society, there appears to be an urgent need to establish intervention models. Multidisciplinary integration & coordination is the need of the hour. Imparting education and holding constructive dialogue with people to prevent "Infodemic" and stigma can reduce the possibility of inappropriate behavior and undue panic (Dubey et al., 2020). Sexual health and wellbeing have been neglected considerably during the pandemic, and given the symbiotic relationship of sexual and emotional health, sensitization to this issue is a must. Considering the social stigma attached, physicians must incorporate sexual education and address the sex-related complaints in their counseling sessions via tele-counseling or person. Digital intimacy should be promoted in these physical distancing times for sexual wellbeing. Sexual counseling can be tailor-made for all sections of society. Education and awareness of sexual activities to eradicate the taboo associated is needed immediately (Banerjee and Rao, 2020).

For health care workers, showing respect and treating them with dignity is the most excellent cure for their emotional upheavals. Symmetrical and sustained relations with family and friends, shorter working time and rotating shifts, long-term psychological counseling, and expressing emotional changes and sexual desires can help them in coping up with the unprecedented experience (Ornell et al., 2020). The mental health of young employed medicos needs monitoring with utmost concern to address workforce deficiencies and inculcate

psychological well-being among them (Dubey et al., 2020; Ornell et al., 2020).

For children, proper parenting with age-appropriate solutions and information exchange can guide them in accepting routine transitions positively. Also, limiting exposure to television and social media can be a tool. Educating and reassuring them with verbal and nonverbal communication about the changing lifestyles, viruses, transmission, preventive measures can help bring awareness and build confidence. In the case of teenagers, minute emotional or behavioral changes also need cognizance by the family. Acknowledging their difficulties and generating optimism amidst the pandemic can empower them (Dubey et al., 2020; Manjunatha, Kumar and Bada Math, 2020; Coping with a Disaster or Traumatic Event, 2020).

For women, sharing the workload at home with the family is imperative. Apart from this construction of a safe place for them during these testing times is the responsibility of their closed ones and the social system. Non-working women should be made available avenues to earn a livelihood and seek redressal for their personal problems despite being under lockdown. Working women should be saved from the mandated pressure to undertake household chores, and collective safeguarding against unorthodox practices that discriminate against girls from a young age should be encouraged.

For the elderly, the first step is increasing awareness about mental and emotional health involving their families via social media platforms, webinars, online programs, and to point messages in understandable language. Stable connection and conversation with loved ones is an essential need. It should be ensured that their health is monitored, and medical care remains uncompromised despite the disruptions in health service

delivery. Also, counseling via telephone or online audio/video-conferencing with psychotherapists can be a significant mood enhancer for them (Dubey et al., 2020; Manjunatha, Kumar and Bada Math, 2020).

For marginalized sections, protecting their basic fundamental human rights, i.e., housing, water, food, sanitation, and essential medical services, is needed. Deployment of mental health counselors to address specific problems and referrals to facilities is required (Dubey et al., 2020).

For quarantined & isolated COVID-19 patients, maintaining a secure communication channel between the health provider and patient and his family is essential. Close tracking and monitoring and usage of stress adaptation models for rehabilitation and consistent nursing by psychotherapists can be used (Dubey et al., 2020). Sexual counseling must be ensured for the quarantined and isolated persons.

For Pre Existing mental illness persons, the pandemic has led to the boom in mental illness cases, which has emerged as an opportunity and challenges for the psychiatric profession (Rajkumar, 2020). Doctors involved in casualty and emergency services need to be prompt and more aware of mental health emergencies to carry out timely referrals. Electronic and quick digital dispensing of drugs is the need of the hour for severely affected people and monitoring. Policymakers need to focus on telemedicine consultation and improve the accessibility to teleconsultation. A list of essential psychotropic need to be made readily available with regular and prescribed monitoring on less strict terms (Chatterjee et al., 2020).

Conclusion

The COVID-19 pandemic has been a harbinger of not only physical stressors but has burdened us with collateral damage in the form of an emotional, sexual and mental health crisis that will undoubtedly loom far after the virus recedes. These percolating impacts on all of us, despite our color, caste, creed, or socioeconomic statuses, are a story laced with tragedy, helplessness, and bravado as well. Since a few sections of our society have suffered more than others, this event has been a reminder of the most significant disparities that have predisposed people to traverse a trajectory of emotional changes that challenge their existence. Through the medium of this review article, we aim to bring the predominant perceptions, unsaid feelings, and changes that society has collectively faced in these unprecedented times. The pandemic can be tackled efficiently through the social interventions that individuals, communities, governments, and institutions can undertake along with a vital element of preparedness about physical and emotional, mental, and sexual health.

COVID-19 has been a forewarning, a great teacher, and an uncertain paradox that has taught us that emotional wellness and holistic well-being are the core principles in establishing a post COVID world. This new decade's advent should now be defined with the words: let's build back better.

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